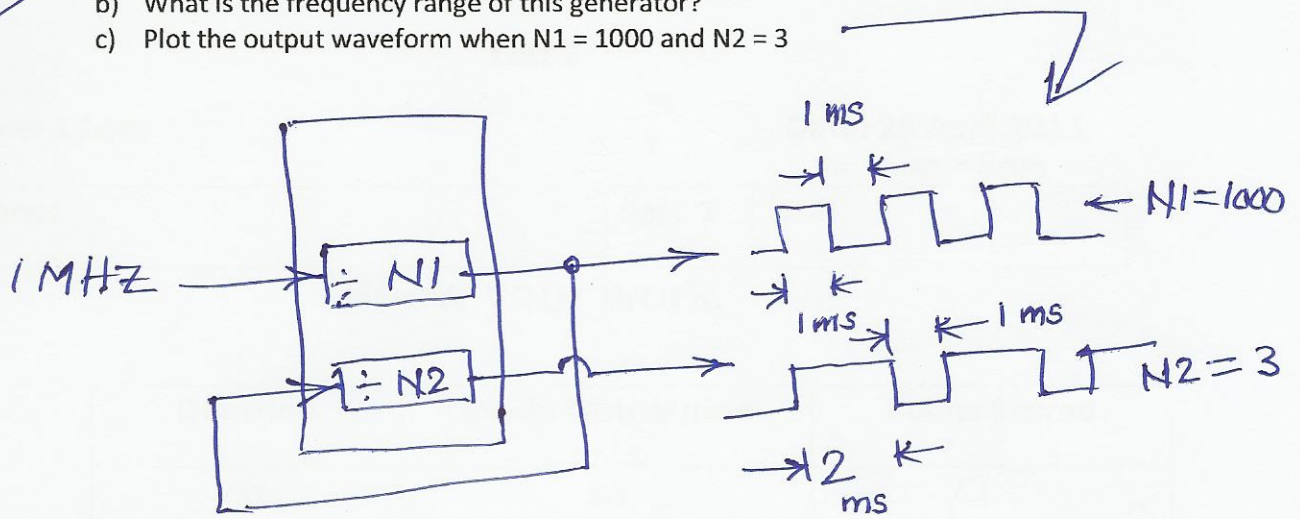


Q2. To design a very wide range square wave generator, connect the output of counter 1 of the PIT to counter 2 input. Assume 1 MHz clock is driving counter 1 input:

- Write an optimum program to achieve this generator.
- What is the frequency range of this generator?
- Plot the output waveform when $N1 = 1000$ and $N2 = 3$



a) Done in the class

$$b) f_{min} = \frac{1 \text{ MHz}}{(2^{16})(2^{16})} =$$

$$f_{max} = \frac{1 \text{ MHz}}{(2)(2)} = 250 \text{ kHz}$$